

PRODUCT DATA SHEET

Code No.: BIA-C1240

Pack sizes: 1 mg, 5 mg

Chromomycin A3

Synonyms: Aburamycin, Toyomycin, NSC 58514, B 599-III, SR1768E

Specifications

CAS # : 7059-24-7 Molecular Formula : $C_{57}H_{82}O_{26}$ Molecular Weight : 1183.3

Source : Streptomyces sp.

Appearance : Yellow powder

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Chromomycin A3 is the major component of the chromomycin complex of the aureolic acid class, isolated from several Streptomyces species, and first reported in 1960. Chromomycin A3 exhibits a broad biological profile as an antibacterial, antifungal and antitumor agent. It binds reversibly to GC-specific DNA ligand in the minor groove which inhibits transcription, DNA gyrase and topoisomerase II activity. The intense UV spectrum and strong fluorescence makes chromomycin a useful stain for DNA.

References

- Studies on streptomycetes. On a new antibiotic, chromomycin. Shibata M. et al., J. Antibiotics Ser. B, 1960, 13, 1.
- 2. Aureolic acid group of anti-tumor antibiotics. Berlin Y. A. Nature 1968, 218, 193.
- 3. Transcriptional regulation of differentiation, selective toxicity and ATGCAAAT binding of bisbenzimidazole derivatives in human melanoma cells. Wong S. et al., Biochem. Pharmacol. 1994, 47, 827.
- 4. Specific staining of DNA with the fluorescent antibiotics, mithramycin, chromomycin, and olivomycin. Crissman H. A. & Tobey R. Methods. Cell Biol. 1990, 33, 97.

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